

IN THE SPECIFICATION

Please replace the paragraph at page 7, lines 22-23, with the following rewritten paragraph:

[5] A transformant having the polynucleotide of [1] or [2], or ~~the vector of claim 5 a~~ a vector having the polynucleotide of [1] or [2].

Please replace the paragraph at page 8, lines 7-9, with the following rewritten paragraph:

[9] An immunoassay method including a step of observing the immunological reaction between the peptide or protein of [3] and ~~the antibody of claim 8 an antibody to the~~ peptide or protein of [3].

Please replace the paragraph at page 8, lines 10-17, with the following rewritten paragraph:

[10] A screening method for a sugar production-regulating substance, which includes the following steps:

- (1) a step of contacting a candidate substance with cells that express a protein encoded by the polynucleotide of claim [1]; and
- (2) a step of cultivating the cells under the condition under which the synthesis of the protein encoded by [1] of claim 3 is induced, and selecting the candidate substance that regulates sugar production.

Please replace the paragraph at page 9, lines 14-22, with the following rewritten paragraph:

[17] A method of detecting diabetes, which includes the following steps:

- (1) a step of determining the expression condition of the polynucleotide of ~~claim 1~~ [1];
- (2) a step of comparing the determined result in (1) with the polynucleotide expression condition in a normal state;
- (3) a step of correlating the change in the polynucleotide expression condition with diabetes, as a result of the comparison.

Please replace the paragraph at page 10, lines 3-10, with the following rewritten paragraph:

[19] A screening method for a sugar production-regulating substance, which includes the following steps:

- (1) a step of contacting a candidate substance with the peptide or protein encoded by [1] of claim 3;
- (2) a step of determining the binding condition of the peptide or protein to the candidate substance, and selecting the complex;
- (3) a step of separating the candidate substance from the complex selected in the previous step.

Please replace the paragraph beginning at page 26, line 17 to page 27, line 7, with the following rewritten paragraph:

In addition, a program of forecasting the expression control region of gene by the use of Neural Network is known ([[http://]][www.fruitfly.org/seq\\_tools/promoter.html](http://www.fruitfly.org/seq_tools/promoter.html), Reese, M.G. et al., "Large Scale Sequencing Specific Neural Networks for Promoter and Splice Site Recognition" Biocomputing: Proceedings of the 1996 Pacific Symposium, edited by Lawrence Hunter and Terri E. Klein, World Scientific Publishing Co., Singapore, January 2-7, 1996). It is also possible to forecast the minimal unit of activity by the use of a program for

forecasting the expression control region through retrieval of transcription factor binding sequences such as Promoter Scan ([[http://]]biosci.cbs.umn.edu/software/proscan/promoterscan.htm, Prestridge, D.S. 1995, Prediction of Pol II Promoter Sequence Using Transcription Factor Binding Site, *J. Mol. Biol.*, 249, pp. 923-932). Further, deletion study may also be carried out around the center of the forecasted core part.